

2000 Concept Master Plan

THE PHYSICAL PLAN CONCEPT

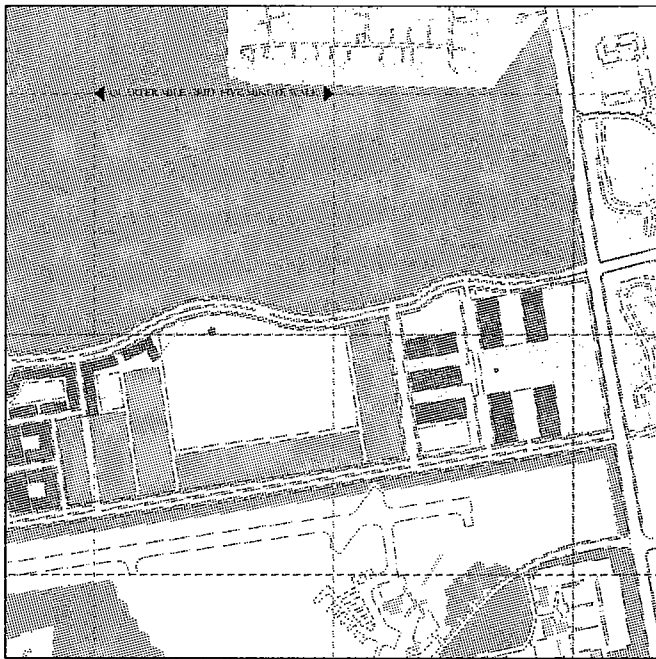
The purpose of the Physical Plan is to create an attractive and stimulating campus workplace for education and research. The proposed plan physically expresses, responds, and supports the vision, program, and principles articulated by the Horace Williams Advisory Committee.

Horace Williams is designed to become a collection of neighborhoods and districts serving approximately 25,000 workers, with research buildings, apartment dwellings, retail districts, civic and institutional buildings, and the potential for 3,000 residents. A series of public outdoor spaces are proposed that

constitute a framework for development and will be the focal points for a variety of public activities.

At the Horace Williams development, the Plan provides two essential features which are found in successful neighborhoods: an integrated mix of land uses, and a well defined urban structure. Both are vital components of place making.

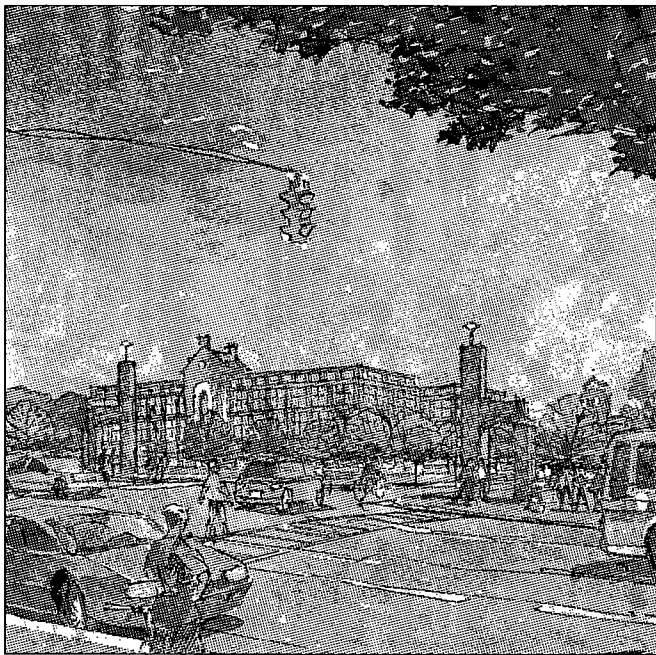
At Horace Williams, several uses that are essential to daily needs are to be conveniently located well within a five-minute walk zone.



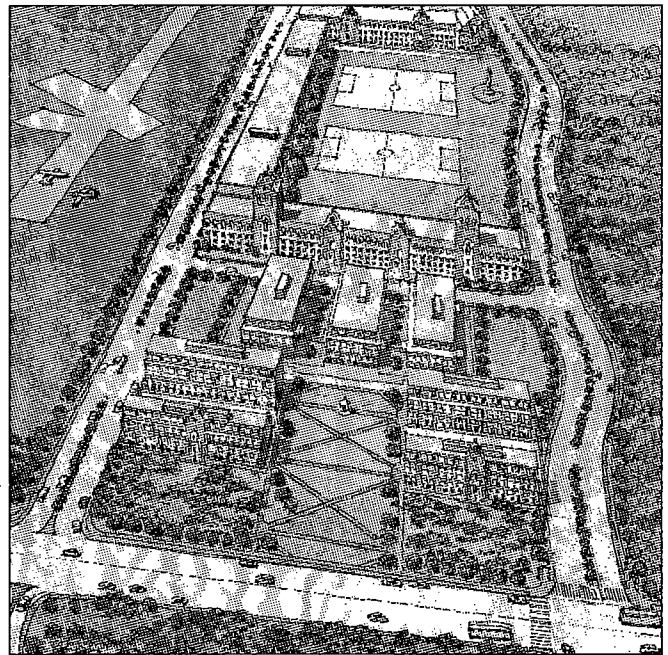
East Precinct Plan



Aerial view of existing Municipal Yard and runway along Airport Road



Street-level view of proposed entry from Airport Road into the East Precinct



Aerial view of East Precinct - entry to Horace Williams from Airport Road

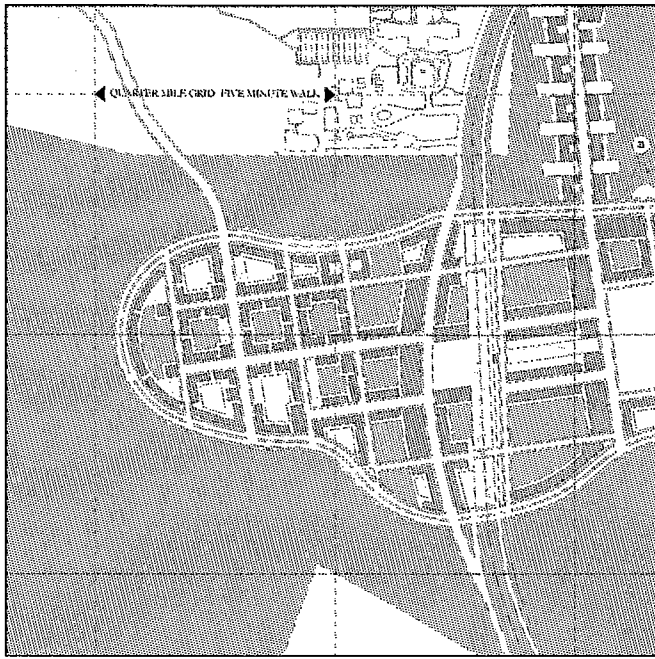
EAST PRECINCT

The Horace Williams property is most easily accessed from Airport Road, a major north-south route connecting I-40 to the university. An open space is proposed along Airport Road, which is similar in dimension to McCorkle Place on the main campus.

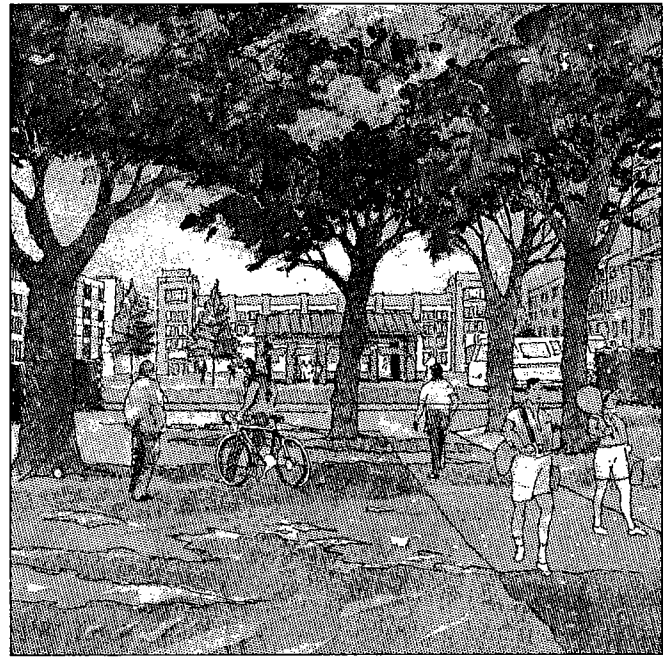
The east precinct is designed as an integrated research campus, consisting of seven large floor-plate buildings with approximately 635,000 gross square feet. Parking for 2,200 cars is provided in a structured deck, three surface parking lots, and on-street spaces. The proposed image portrays a

group of distinguished institutional buildings around a campus green.

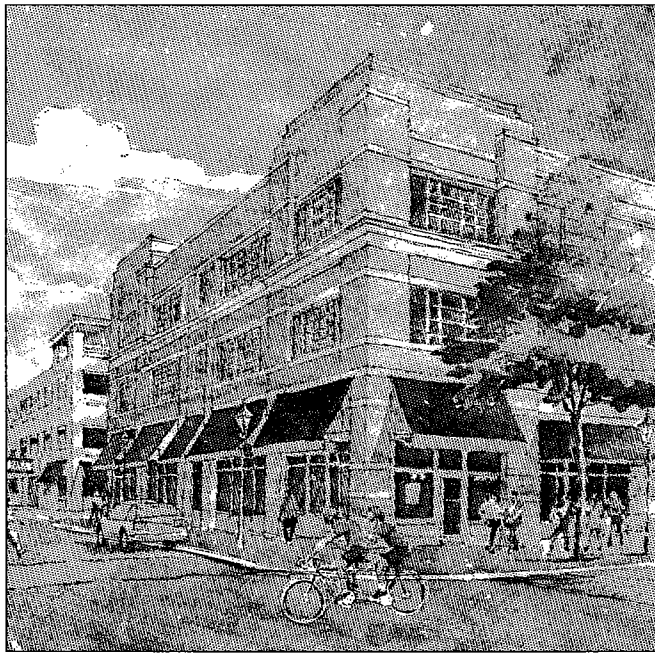
The three-story research buildings are set back 250 feet, maintaining the tree lined corridor of Airport Road. At Horace Williams, the primary public identity of the place comes by way of the central green on Airport Road. This is the most conspicuous feature of the layout and its most significant public gesture. The overall building pattern within the development serves to define and support formed open spaces and the space of the street and hence acts as a kind of background texture.



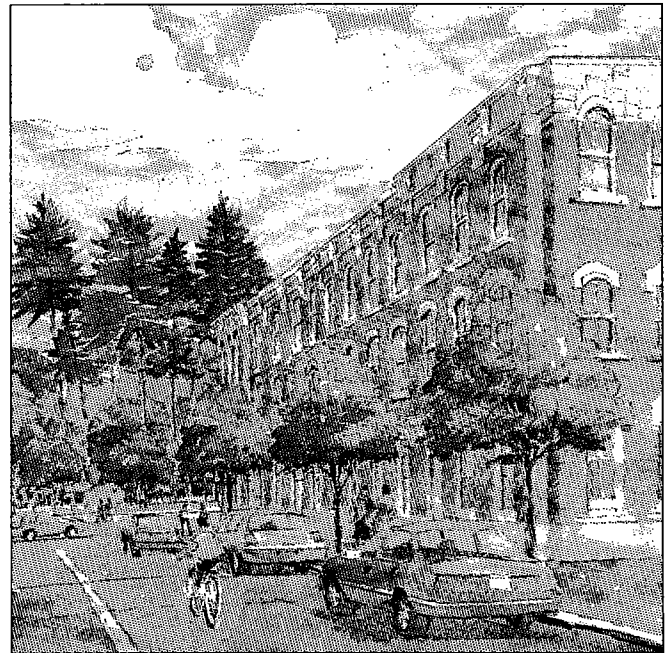
West Precinct Plan



Looking west towards the bus stop at the center of the transit corridor



Research building with retail at base and parking structure at rear



Residential street with three-story buildings and vista to existing forest

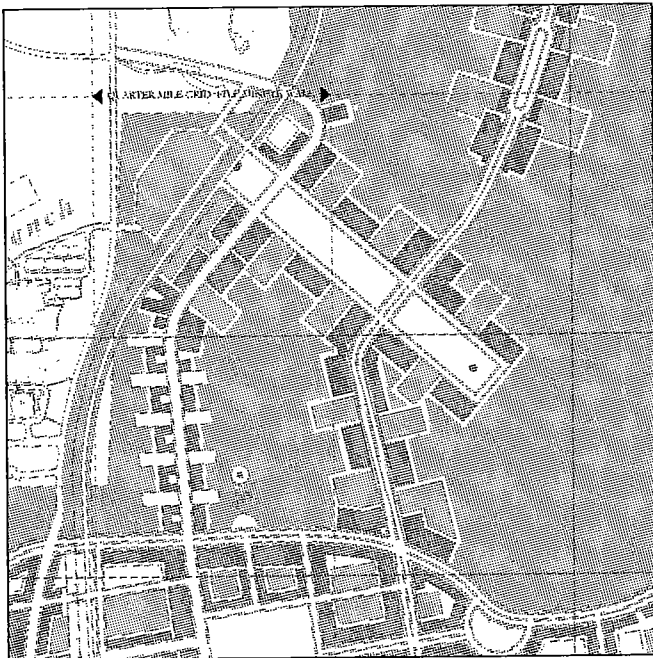
WEST PRECINCT

The west precinct is designed to capitalize on the transit corridor that connects the Horace Williams property to the university, as well as the elementary, junior and high schools located to the immediate north of the precinct. The precinct is planned to be predominantly residential, given the proximity to the schools and transit corridor.

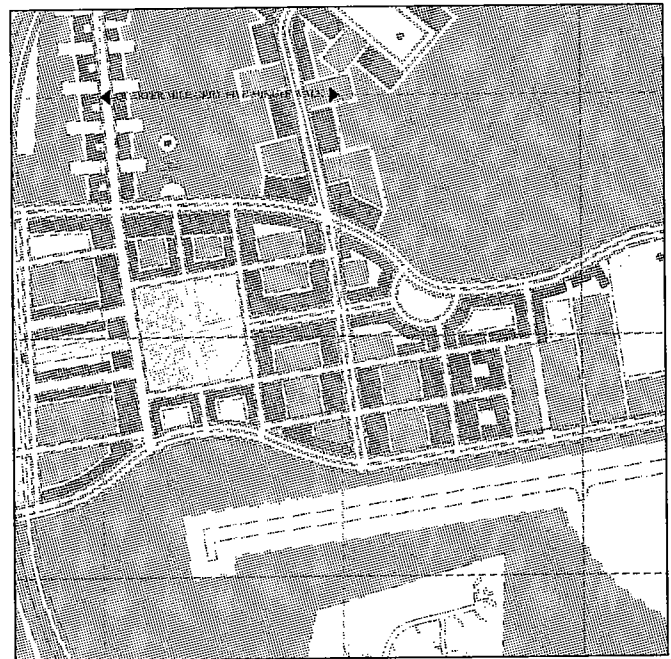
As shown on the precinct plan, several small neighborhood pocket parks are proposed throughout the neighborhood. The parks may be designed to serve different age groups of the residential population.

Seawell School Road is deflected away from the railroad tracks and dedicated busway to accommodate research buildings with retail along the base. The plan proposes that the area west of the railroad track become a vibrant town center organized around a town green with services for residents, commuters, and the teacher and student population from the adjacent schools.

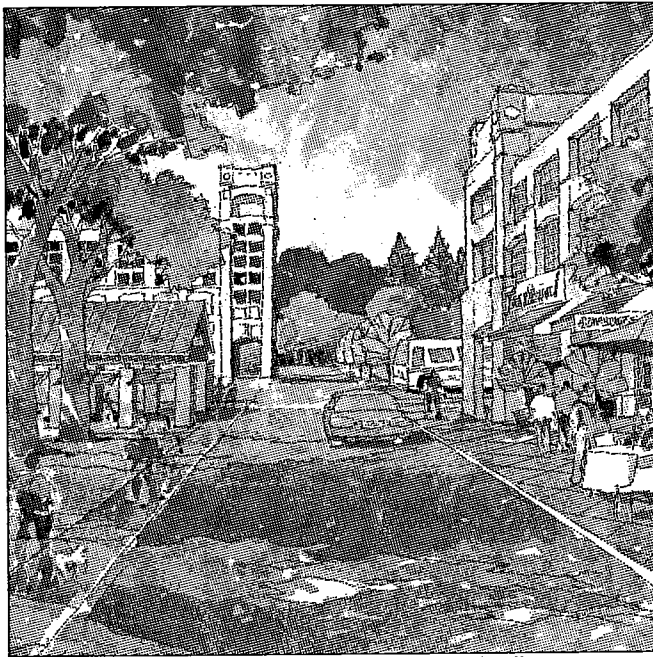
The perspective sketches depict the low-scale buildings in the west precinct and in the entire Horace Williams development.



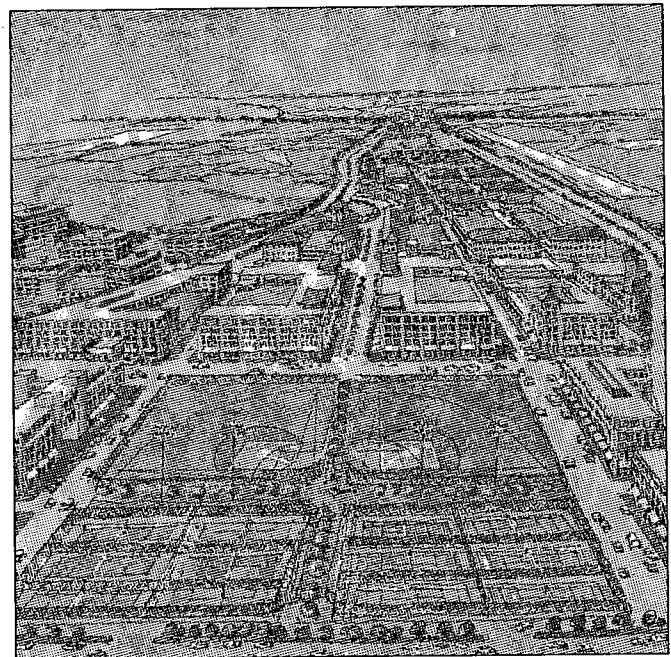
Hilltop Precinct Plan



Central Precinct Plan



Bus stop, parking structure, and retail at west end of Hilltop Precinct



Recreational open space within the Central Precinct

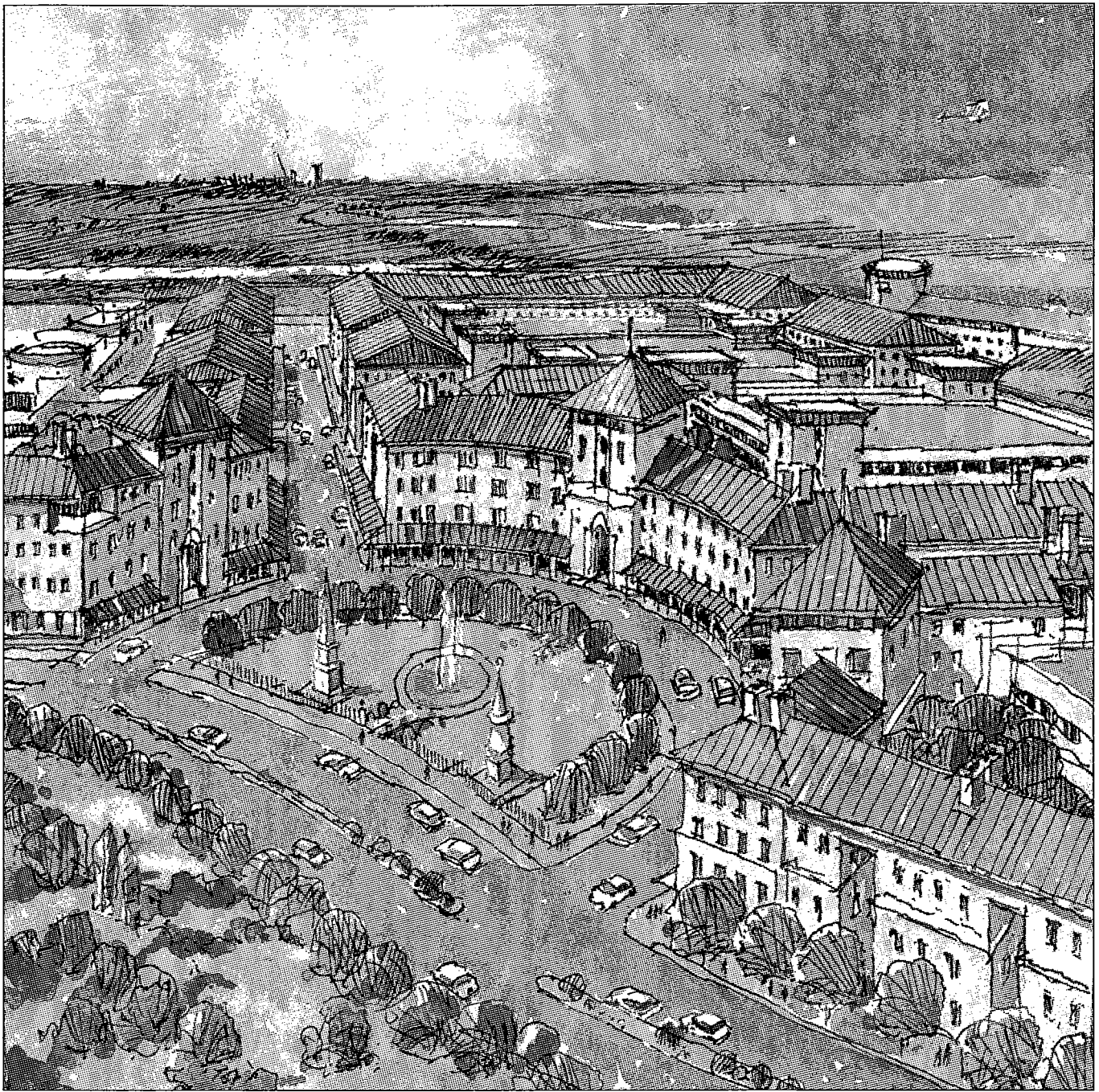
HILLTOP PRECINCT

The hilltop precinct is organized around a linear open space that starts at a transit bus stop and extends out towards the open landscape. A 2,000 car parking deck is located adjacent to the transit stop, and sites for additional parking decks are provided between the corporate office buildings.

A town square surrounded by retail buildings is planned at the transit stop. On the western edge of the precinct provision is made for multi-family residential buildings. Approximately three million gross square feet of building is proposed for this precinct supported by 7,700 parking spaces.

CENTRAL PRECINCT

The central precinct is envisioned as a traditional neighborhood development, with a grid network of streets and a town center at the heart of the property. The linear precinct is axially organized around three public spaces: a crescent shaped public space, a recreational park, and a linear park that begins at the transit bus stop along the dedicated bus lane. Research, retail, and residential buildings are organized around these public spaces, and parking decks are buried within the blocks to minimize their impact on the pedestrian-friendly environment.



Town Center in the Central Precinct within the heart of the development

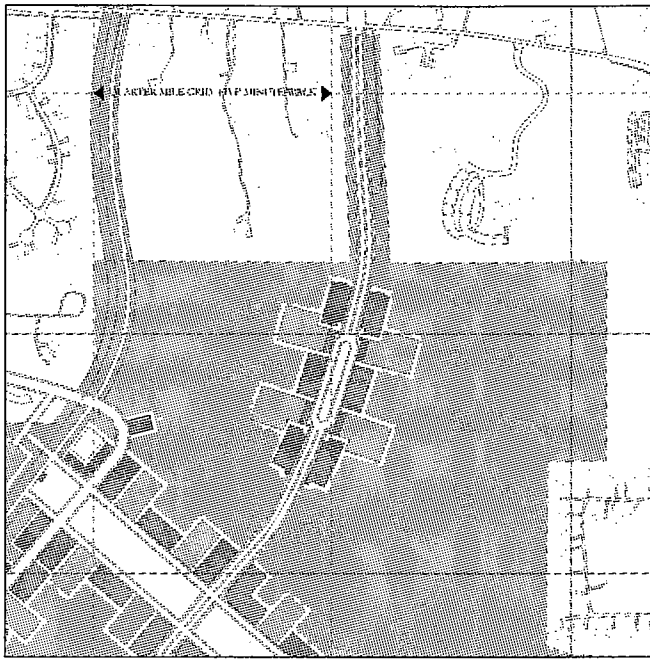
TOWN CENTER

The town center is centrally located and is positioned between the two east-west connector streets, and two north-south streets terminating in this precinct. Additionally, Seawell School Road, the train tracks, and the dedicated bus lane demarcate the western edge of the precinct.

The crescent shaped space (shown in the drawing above) is the retail hub of the neighborhood, with a mix of activities occurring around the space. Two blocks to the west of this space is the seven acre recreational park, with softball fields

and tennis courts surrounded by commercial and residential buildings. Commercial tenants and residents have easy access to these amenities. Students from the main campus could travel to the Horace Williams property by bus, and within a few minutes walk from the bus stop they can have access to the recreational park.

The proposed plan allows for a mix of housing types to be provided within this precinct, all within comfortable walking distance to recreation, workplace, shopping, and transit.



North Precinct Plan



View of the linear park within the North Precinct

NORTH PRECINCT

The north entrance to the Horace Williams property would be from the proposed extension of Weaver Dairy Road, which would bring southbound automobile traffic from I-40 into the research campus planned in the north precinct.

The proposed plan organizes six large floor-plate research buildings and four parking structures around a contained linear park space. The parking garages are masked with retail frontages on the ground level. The precinct includes 500,000 gross square feet of research office space, 1,800 car spaces, and 12,000 square feet of retail.

ENVIRONMENT ISSUES

The environmental principles and goals embodied in the concept plan for sustainable site design in terms of conserving land and water resources is as follows:

MINIMUM DISTURBANCE

- Disturb as little of the proposed site as necessary.
- Work with the natural contours; avoid excessive earthmoving.
- Limit removal of existing natural vegetation.
- Avoid placing structures in floodplains and sensitive areas.
- Keep building and parking envelope as compact as possible.
- Maintain riparian buffer along streams.

MAINTAIN NATURAL HYDROLOGIC CYCLE

- No net increase in Volume of Runoff.
- Avoid unnecessary impervious surfaces - make pervious if possible.
- Maintain recharge of rainfall to groundwater.
- Provide retention beds to mitigate stormwater
- Maintain infiltration for existing vegetation.
- Use Best Management Practices such as Porous Pavement.
- Collect rainwater for plant and garden watering.

BENEFITS OF INFILTRATION

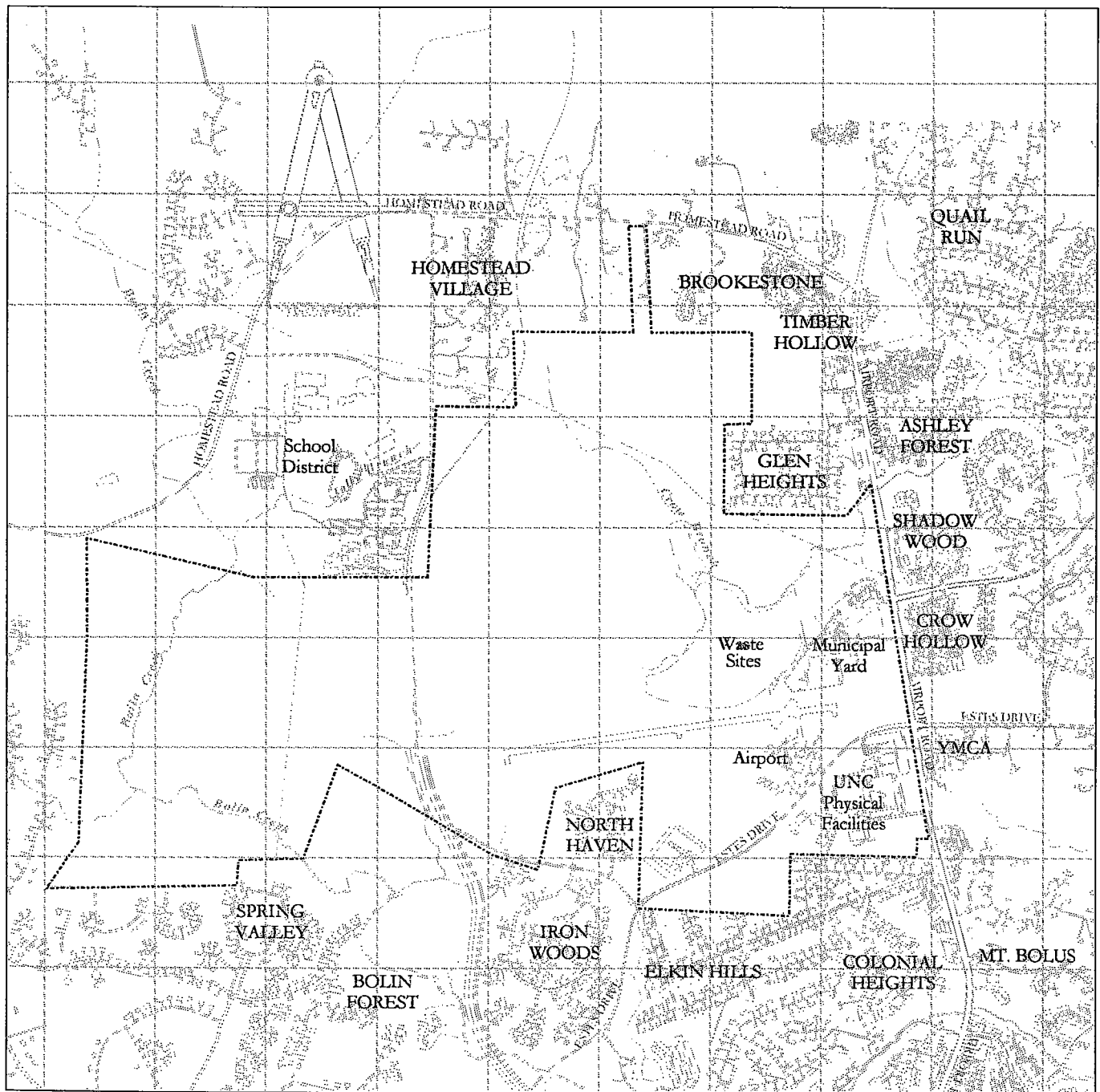
- Maintain Hydrologic Balance
- Remove Pollutants
- Prevent increased downstream flows
- Recharge Groundwater
- Maintain Streamflows

WATER SUPPLY AND WASTEWATER

- Use On-Site Water and Wastewater if feasible.
- Use low-flow fixtures.
- Use alternatives to chemical disinfection (i.e., UV disinfection).
- Reuse treated wastewater.
- Use Low maintenance, low energy wastewater treatment systems.
- Apply treated effluent to land surface to recharge groundwater.

MAINTAIN WATER QUALITY

- Use native species and limit future chemical site maintenance.
- Limit artificial areas such as maintained lawns.
- Avoid discharges of wastewater to streams and lakes.
- Avoid earthwork which creates erosion and sediment problems.
- Maintain native vegetation.
- Use low maintenance, water quality Best Management Practices (BMP).



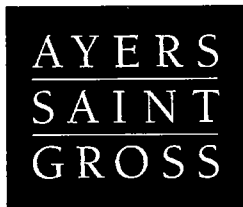
SURROUNDING NEIGHBORHOODS

The conceptual plan embodies the principles of smart growth, a demographic shift, strong environmental ethics, increased fiscal concerns, and more nuanced views of growth.

New smart growth is more town-centered, is transit and pedestrian oriented, and has a greater mix of housing, commercial and retail uses. It also preserves open space and many other environmental amenities. But there is no "one-size-fits-all" solution. Successful communities do tend to have one thing in common, a vision of where they want to go and of what things

they value in their community, and their plans for development reflect these values.

The University and consultant team would like to engage the neighboring community in an open discussion focusing on the conceptual plan and its impact on Chapel Hill. It is important to the process that all concerned parties understand the intent and quality of this smart growth development. The inclusive process will positively inform the plan, add to the diversity and richness of region, and set a new standard for development in the State.



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